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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,119	04/02/2001	Craig W. Hodgson	LITTONP.002C1	9187
32205	7590	11/05/2003	EXAMINER	
PATTI & BRILL ONE NORTH LASALLE STREET 44TH FLOOR CHICAGO, IL 60602			CHANG, AUDREY Y	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/824,119	HODGSON ET AL.
	Examiner	Art Unit
	Audrey Y. Chang	2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 25 August 2003.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1 and 3-30 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1 and 3-30 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \*    c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1)  Notice of References Cited (PTO-892)      4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)      5)  Notice of Informal Patent Application (PTO-152)

3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.

6)  Other: \_\_\_\_\_.

## DETAILED ACTION

### *Remark*

- This Office Action is in response to applicant's amendment filed on August 25, 2003, which has been entered as paper number 18.
- By this amendment, the applicant has amended claim 4.
- Claims 1 and 3-30 remain pending in this application.

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. **Claims 1 and 3-30 are rejected under 35 U.S.C. 112, first paragraph**, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

*The reasons for rejection are set forth in the previous Office Action dated June 9, 2003.*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1 and 3-30 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

*The reasons for rejection are set forth in the previous Office Action dated June 9, 2003.*

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 3-10, 13-20, 21, 22, and 23-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Giallorenzi (PN. 4,648,083).**

*The reasons for rejection are set forth in the previous Office Action dated June 9, 2003.*

***Response to Arguments***

7. Applicant's arguments filed on August 25, 2003 have been fully considered but they are not persuasive.

8. In response to applicant's arguments concerning the 35 USC 112, first paragraph, rejections to the claims, the applicant is respectfully reminded that the arguments are *mainly based* on the identification of "detector D1" with the term "signal designation". However there is nowhere in the specification and the claims to give such identification, definition and support. Although the claims are interpreted in light of the specification, *limitations* from the specification are not read into the claims. Particularly in this case there is no indication or no conceivable reasons in the specification and in the claims to allow one to interpret "signal designation" as "detector". See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). **The rejections therefore still stand.**

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9. In response to applicant's arguments concerning the 35 USC112, second paragraph, rejections to the claims, the applicant is respectfully reminded that the claims as stand now FAIL to "meet the threshold requirements of clarity and precision" as required and stated in MPEP 2173.02 for the reasons stated below. Firstly, the claims have recited the following terms "z sensor groups, each of said sensor groups comprising ... input coupler and output couplers", "said input couplers and said output couplers in said z sensor groups", "first output (or input) coupler", and "second output (or input) coupler". These terms recite a plurality of input and output couplers in all of the z sensor groups. The term "*said output couplers*" and the term "*said input coupler*" in the claims therefore become *confusing* and *indefinite* since it is not clear which output coupler or which input coupler is referred here. These confusing and indefinite phrases seriously contribute "antecedent basis" problems. In fact, since there are a plurality of output and input couplers in each of the z sensor groups, it is even not clear if the couplers are within the same sensor group or not.

The phrase "a signal designation on one of said n return fiber lines" could be interpreted as (1) signal designated on the return fiber line, (2) a **return fiber line** with signal designated on it, since the specification fails to give a DEFINITION for such term. In applicant's arguments, the applicant has identified the "signal designation" with the "detector" however there is no support for such interpretation in the specification. The phrase therefore remained indefinite and unclear. **The rejections under 35 USC 112, second paragraph, still hold.**

10. In response to applicant's arguments concerning the prior art rejections to the claims, the examiner wishes to point out respectfully that applicant's arguments are based on applicant's "interpretation" of the claims however the claims, for the above reasons, have *failed to define definite scopes* and the arguments are therefore irrelevant here. Since although the claims are interpreted in light of the specification, **limitations from the specification are not read into the claims**. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). With regard to the issue that the cited

reference does not teach explicitly that the coupler ratios are determined to reduce the differences in the returned optical signal power levels, the examiner wishes to point out respectfully that one of the implicitly function of a coupler is to have certain desired coupling ration to adjust the power level of the signal. It is extremely common practice in the art to select the coupling ratios in the couplers to adjust the output power levels of the signals.

11. The applicant is respectfully reminded that although **claims 11 and 12 have not been amended** however there are **typographic errors** in the claims. The term "**the m H n sensor array**" has been presented erroneously. **Corrections are required.**

***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Audrey Y. Chang whose telephone number is 703-305-6208. The examiner can normally be reached on Monday-Friday (8:00-4:30), alternative Mondays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 703-305-0024. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

*Audrey Y. Chang  
Primary Examiner  
Art Unit 2872*

A. Chang, Ph.D.